Claims

1. A method for correcting positioning errors in rock drilling, where a boom, attached from one end to a carrier and turnable in relation to it about joints, and a rock drill, mounted turnable to the other end of the boom, are arranged in the drilling position for drilling a hole in a way that the boom is controlled using control devices of the drilling rig in relation to various movements until the boom is in its set position, wherein the deviation of the boom´s actual position from the calculated theoretical position is measured, and the boom´s position is corrected on the basis of the measured deviation c h a r a c t e r i z e d in that the deviation of the boom position from the theoretical position is measured at predetermined intervals as a function of the position of at least one boom joint, that the measured deviations are stored in the memory of the drilling rig, and that when the boom and the rock drill are positioned to the drilling position, the position is corrected on the basis of the stored deviation that corresponds to the position of the joint corresponding to the said drilling position.

2. A method according to claim 1, wherein the deviation of the boom position from the calculated theoretical position is measured in the turning direction of at least one joint between the boom and the carrier.

3. A method according to claims 1 or 2, wherein the deviation of the boom position from the calculated theoretical position is measured as a function of the positions of two joints, in crossing position to one another, between the boom and the carrier.

4. A method according to claim 3, wherein the deviation of the boom position from the calculated theoretical position is measured as a function of both angles so that at the theoretical points indicating the boom position in horizontal and vertical directions at predefined intervals in a two-dimensional co-ordinate system, the deviation is defined as a function of the positions of the crossing joints.

5. A method according to any of the above claims, wherein the deviations corresponding to each joint position are measured at predefined intervals in a certain joint position value and, when positioning the boom to the drilling position, the calculated theoretical position of the boom is corrected on the basis of the deviations corresponding to the joint positions obtained in this way.

6. A method according to claim 5, wherein the deviation between adjacent, stored joint positions of each turning movement is defined by calculating an approximation for the change of deviation from one position value to the other on the basis of the measured deviations between the said joint position values.

7. A method according to claim 6, wherein the approximation for the deviation is calculated between the deviation values stored in a memory.

8. A method according to any of the above claims, wherein in addition caused by at least one other movement the deviation is measured as a function of the value of the movement sensor, and the theoretical position of the boom is corrected on the basis of the deviation corresponding additionally to this movement when positioning the boom to the drilling position.

9. A method according to claim 8, wherein on a boom equipped with a rotation mechanism for turning the rock drill together with its feed beam around an axis parallel to the drilling axis, the deviation caused by the rotation movement is measured between the true position of the boom and the theoretically calculated position of the boom, and that the position of the boom is corrected on the basis of the deviations corresponding to positions of the boom as well as the joints between the boom and the carrier, and the position of the rotation mechanism.

10. A method according to any of the above claims, wherein the deviations are stored as deviations of the drill bit position of the rock drill and deviations of the drilling direction determined by the drill steel axis.

11. A rock drilling equipment, with a carrier, a boom attached turnable about joints in relation to the carrier, a rock drill attached turnable to the other end of the boom, joint sensors indicating the positions of the various boom

joints, and control devices for controlling the boom to the drilling position for drilling a hole, c h a r a c t e r i z e d in that it includes a memory device for storing the deviations between the true position of the boom and the theoretical position calculated on the basis of the joint sensor values as a function of the turning angle of at least one boom joint, and a calculating device for correcting the boom position on the basis of the deviations stored in the said memory device and corresponding to the value indicated by the joint sensor of the said joint.

12. A rock drilling equipment according to claim 11, wherein the memory device is arranged to store the deviations between the true position of the boom and the theoretical value calculated on the basis of the joint sensors as a function of the turning angles of two to one another crossing joints between the boom and the carrier, and the calculating device is arranged to correct the boom position on the basis of the deviations, stored in the said memory unit, corresponding to the position and indicated by the joint sensors of both joints.

13. A rock drilling equipment according to claim 12, wherein the memory device is arranged to store the deviations in a two-dimensional co-ordinate system between the true position of the boom and the theoretical position calculated on the basis of the joint sensors as a function of the positions of two crossing joints.

14. A rock drilling equipment according to any of the claims 11 - 13 equipped with a separate rotating mechanism for rotating the rock drill in relation to the boom end and about an axis that is parallel with the drilling axis of the rock drill, wherein the memory device is arranged to store the deviations between the true position of the boom and the theoretical position calculated on the basis of the joint sensors, as a function of the position of the rotation mechanism, and the calculating device is arranged to correct the boom position and the turning angles of the joints between the boom and the carrier and correspondingly the turning angle of the rotating mechanism on the basis of the corresponding deviations.